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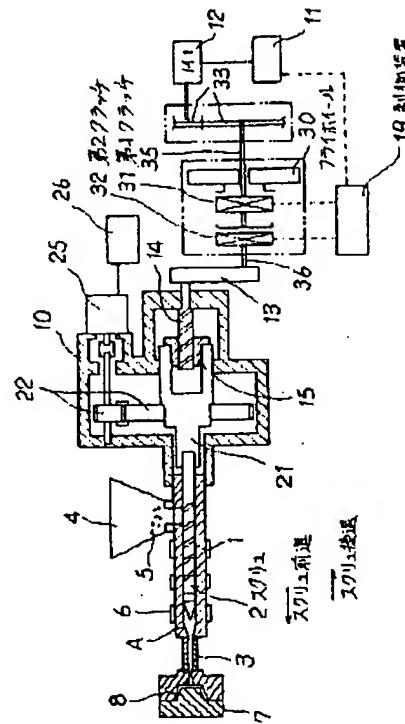
APPLICATION DATE : 28-03-90
 APPLICATION NUMBER : 02076842

APPLICANT : MITSUBISHI HEAVY IND LTD;

INVENTOR : HAMADA HAJIME;

INT.CL. : B29C 45/50 B29C 45/53

TITLE : INJECTION DRIVING DEVICE OF
 INJECTION MOLDING MACHINE



ABSTRACT : PURPOSE: To remove an expensive and large-sized servo motor and servo amplifier, and enable a small-sized servo motor and servo amplifier to be employed replaceably by disposing a flywheel on a shaft connected with an electric motor or a hydraulic motor via a first electromagnetic clutch.

CONSTITUTION: A first electromagnetic clutch 31 is operated by a control device 19 except an injection process in order to save energy. At the commencement of high speed injection, a second electromagnetic clutch 32 is operated by the control device 19 so as to couple a shaft 35 and a shaft 36. The control device 19 is also set with the operation time of the second clutch 32, the rotational force of a small-sized servo motor 12 and a flywheel 30 is transmitted in turn to the shaft 35, the second electromagnetic clutch 32, the shaft 36, a timing belt 13, and a ball screw 14. The rotation of the ball screw 14 is converted into a rectilinear motion to an output shaft 21 by means of a fixed nut 15 and thus the output shaft 21 and a screw 2 advance, as a result, the molten resin stored in a chamber A is injected into a mold 7 for obtaining a molding 8. In the case of a light load, by not operating the first electromagnetic clutch 31 by the control device 19, a small-sized and inexpensive servo motor amplifier can be used, thereby obtaining a large injection horsepower.

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